

U.S. Application No.: 09/915,716
AMENDMENT F

Attorney Docket No.: 3968.037

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IN THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-13 cancelled.

14. (Previously presented) The cleaning system according to Claim 23, wherein $a_0=0.2771$, $a_1=-0.0042$, $a_2=-0.0094$, $a_3=0.0061$, $a_4=-0.2738$ and $a_5=-0.0377$; and $x_1=\sigma$ -moment M_2 , $x_2=\sigma$ -moment M_3 , $x_3=\sigma$ -moment M_4 , $x_4=f_{don}$, and $x_5=\Delta G_{Cosmo}$; and $n=5$.

15. (Cancelled)

16. (Previously presented) The cleaning system according to Claim 23, wherein at least 75% of said fragrance ingredients have a relative fabric affinity value (y) of at least 4.

17. (Previously presented) The cleaning system according to Claim 16, wherein at least 85% of said fragrance ingredients have a relative fabric affinity value (y) of at least 4.

18. (Previously presented) The cleaning system according to Claim 23, wherein at least 50% of said fragrance ingredients have a relative fabric affinity value (y) of at least 6.

19. (Previously presented) The cleaning system according to Claim 18, wherein at least 60% of said fragrance ingredients have a relative fabric affinity value (y) of at least 6.

20. (Previously presented) The cleaning system according to Claim 19, wherein at least 70% of said fragrance ingredients have a relative fabric affinity value (y) of at least 6.

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21. (Previously presented) The cleaning system according to Claim 23, wherein said fragrance system comprises additional additives selected from the group consisting of anti-microbial ingredients, UV filters, anti-static ingredients, optical brighteners, cooling agents, and warming agents.

Claim 22. (Cancelled)

23. (Currently amended) A cleaning system comprising:

- a) liquid CO₂, and
- b) a fragrance system, wherein said fragrance system comprises fragrance ingredients that are determined to be substantive to garments according to the following mathematical equation:

$$y = a_0 + \sum a_n x_n$$

wherein y is defined as the predicted relative substantivity of an aroma chemical having a range of from about 1-7 with 7 being the most substantive;

wherein x_{1-n} are defined as molecular descriptors derived out of COSMO RS calculations;

wherein n is defined as number of descriptors used in the said equation,

wherein a_{0-n} are defined as coefficients derived from linear regression analysis;

wherein at least 60% of said fragrance ingredients have a relative fabric affinity value (y) of at least 4

wherein the fragrance ingredients having a relative fabric affinity value (y) of at least 4 are selected from the group consisting of:

benzaldehyde, methylbenzoate, 4,7-methano-3a,4,5,6,7,7a-hexahydro-5 (or 6)-indenyl-
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acetate, phenylacetaldehyd 100%, terpinolene, eucalyptol, benzylacetate, cis- and trans-3,7,-dimethyl-2,6-octadienal, tricyclodecenyl isobutyrate, 3-(4-ethylphenyl)-2,2-dimethylpropanal, isobornylacetate, ethylene dodecanedioate, di-menthylacetate, 2-tert-butylcyclohexylacetate, aldehyde C10, methyl dihydrojasmonate, cyclohexylmethylcarbinolcrotonate, trans-2 decenal, 2-methyl-3-(4-isopropylphenyl)propanal, ethylene brassylate, iso-alpha methyl ionone, 9-hexadecen-16-olide, 5-phenyl-3-methyl-2-pentenitrile, 2-methyl-3-(4-tert-butylphenyl)propanal, ~~aldehyde~~ aldehyde C14, maltol, vanillin, ~~aldehyde~~ aldehyde C12, methyl nonyl acetaldehyde, linalool perfumery grade fine fragrance, ethylvanillin, eugenol, 3a,6,6,9a-tetramethyldodecahydronaphtho[2,1-b]furan, cedryl methyl ether, Terpeneol Alpha, 4-(4-hydroxy-4-methylpentyl)-3-cyclohexene, 2,6-dimethyl-2-heptanol, 2-ethyl-4-(2,3,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol, Mandaril, profarnesol, methylanthrenilate, hexahydroiraldein, benzylcinnamate, benzylsalicylate, Jasmol, hydroxycitronellol, and (2E,7R,11R)-3,7,11,15-tetramethyl-2-hexadecen-1-ol.

24. (New) A cleaning system comprising:

- a) liquid CO₂, and
- b) a fragrance system, wherein said fragrance system comprises fragrance ingredients that are determined to be substantive to garments according to the following mathematical equation:

$$y = a_0 + \sum a_n x_n$$

wherein y is defined as the predicted relative substantivity of an aroma chemical having a range of from about 1-7 with 7 being the most substantive;

wherein x_{1-n} are defined as molecular descriptors derived out of COSMO RS calculations;

wherein n is defined as number of descriptors used in the said equation,

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wherein a_{0-n} are defined as coefficients derived from linear regression analysis;
wherein at least 60% of said fragrance ingredients have a relative fabric affinity value (y)
of at least 4,

wherein the fragrance ingredients having a relative fabric affinity value (y) of at least 4
are selected from the group consisting of:

benzaldehyde, methylbenzoate, 4,7-methano-3a,4,5,6,7,7a-hexahydro-5 (or 6)-indenyl-
acetate, terpinolene, eucalyptol, benzylacetate, cis- and trans-3,7,-dimethyl-2,6-octadienal,
tricyclodecanyl isobutyrate, isobornylacetate, ethylene dodecanedioate, di-menthylacetate, 2-tert-
butylcyclohexylacetate, cyclohexylmethylcarbinolcrotonate, trans-2 decenal, 2-methyl-3-(4-
isopropylphenyl)propanal, iso-alpha methyl ionone, 9-hexadecen-16-olide, 5-phenyl-3-methyl-2-
pentenonitrile, aldehyde C14, maltol, 3a,6,6,9a-tetramethyldodecahydronaphtho[2,1-b]furan,
cedryl methyl ether, terpineol alpha, 4-(4-hydroxy-4-methylpentyl)-3-cyclohexene, 2,6-dimethyl-
2-heptanol, 2-ethyl-4-(2,3,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol, Mandaril, profarnesol,
methylanthrenilate, hexahydroiraldein, benzylcinnamate, Jasmol, hydroxycitronellol, and
(2E,7R,11R)-3,7,11,15-tetramethyl-2-hexadecen-1-ol.

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